Subject: FREEDOM 1 FLIGHT

Facts:

On 4 July 1987, a U. S. Air Force B-1B strategic bomber broke four previously established world speed, distance and payload records and established 14 new records.

Four Air Force crew members from the Air Force Contract Management Division at Palmdale and the 96th BMW of the Strategic Air Command at Dvess AFB. Texas, took off from the Rockwell International facility at Palmdale, California, and flew the record-breaking flight in restricted airspace along the Pacific coast off Vandenberg AFB, California. The B-1B traveled 1,080 nautical miles (2.000 km) with a payload of 66,150 pounds (30,000 kg) at a speed of 670 miles per hour (approximately .9 Mach).

Two of the records had been held since 1959 by the Soviet Union. They had been set by a four engine, turbojet M-type bomber (103M). The other two records had been held since 1962 by the U.S. Air Force, attained in a C-135, the first U.S. Air Force jet transport.

The flight was certified by the National Aeronautic Association (NAA) which is the official sanctioning group for aviation record attempts in the U.S. NAA represents the Federation Aeronautique Internationale (FAI) within the U.S. The FAI is based in Paris.

The B-1B which established the new records was a recently completed production aircraft. The record runs were made during an acceptance flight check accomplished by the Air Force before a new craft is delivered to its first operational base. Water was used to simulate the weight of the weapons which would be carried on an operational mission.

Data:

- 2000 km (distance) 30,000 kg (payload) B-1B
 - 2,000 km average speed 669.9 mph
 - 1,000 km average speed 676.5 mph
- Records broken 4 (Open class)
 - USSR 103M 1959 639 mph 1,000 km 15,000 kg* USSR 103M 1959 639 mph 1,000 km 25,000 kg*

 - USA C-135 1962 616 mph 2,000 km 15,000 kg*
 - C-135 1962 616 mph 2,000 km 25,000 kg* USA
- New records 14 (C-1Q class, aircraft under 441,000 lbs.)
 - 1,000 km, 0-30,000 kg 7 records
 - 2,000 km, 0-30,000 kg 7 records

B-1B SETS 18 WORLD RECORDS FOR SPEED-DIST-PAYLOAD

^{*}These records were subsequently recaptured by the USSR.

Subject: FREEDOM 2 FLIGHT

Facts:

On Thursday, 17 September 1987, B-1B aircraft 86-0110 flew a 5000-kilometer (2700 nautical mile) course with a payload of 30,000 kilograms (66,150 pounds) and at a speed of 655 miles per hour. During the flight nine existing world records were broken and nine new records were set.

The record breaking mission was flown by an Air Force flight crew from the USAF Contract Management Division at Palmdale and the 28th BMW of the Strategic Air Command at Ellsworth AFB, South Dakota.

The flight was sanctioned by the National Aeronautic Association (NAA), the U. S. representative for the Federation Aeronautique Internationale (FAI). The NAA registered the records with the FAI, the world authority for aviation records.

The closed course for the record attempt began and ended over Edwards AFB. The first leg of the course took the aircraft north along the Pacific coast to Washington state, then turned southeast to Colorado followed by a western heading back to Edwards AFB.

Data:

- 5,000 km (distance) 30,000 kg (payload) B-1B
 - Average speed 655 mph
- · Records broken 9

Open class

- USA B-52-1958 597 mph 5,000 km 0 kg
- USA- KC-135- 1958 587 mph 5,000 km 1,000 thru 10,000 kg
- USSR-IL-76 1975 -507 mph 5,000 km 15,000 thru 30,000 kg
- New records 9

C-1Q class (aircraft under 441,000 lbs.)

- 5,000 km, 0-30,000 kg

Subject: 1988 MACKAY TROPHY

Facts:

In August , 1988, the Air Force Chief of Staff, General Larry Welch, presented the 1988 MacKay Trophy to representatives of the Air Force Contract Management Division Detachment 15 (the Rockwell Air Force Plant Representative Office), and to the B-1B System Program Office. The trophy was presented in recognition of the two B-1B world record setting flights, Freedom 1 and Freedom 2. This prestigious trophy, which dates back to 1912, is presented each year to an Air Force individual or group for carrying out "the most meritorious flight or flights of the year." Past recipients include such notable figures in aviation as Hap Arnold, Jimmy Doolittle and Chuck Yeager.

For the 1988 award, General Welch selected the Air Force team responsible for the B-1B flights which captured 36 world records for speed, distance and payload. A B-1B established 18 of these world records during the 4 July 1987 Freedom 1 flight. A second B-1B captured an additional 18 records during the 17 September 1987 Freedom 2 flight. Both flights originated at Palmdale, where the Rockwell North American Aircraft team played a key role in preparing the aircraft. Both of the record-setting B-1Bs had just come off the production line and entered acceptance flight testing.

Refer to Freedom 1 Flight, page D-4, and Freedom 2 Flight, page D-5.

Subject: CORONET BAT GOES ROUND THE WORLD

Background:

Two B-1B bombers and eight flight crew members returned to Dyess AFB, Abilene, Texas, Saturday, June 3, 1995 after completing a 36-hour, 13-minute around-the-world mission to demonstrate the B-1B's long range power projection capability and to establish world records.

The mission, "Coronet Bat" challenged crews and maintainers to prepare for the launch of four B-1B June 2 at 3 am (Central Standard Time) with two scheduled to fly the unprecedented nonstop flight around the world. As planned, one B-1B recovered at Langley AFB, Va.; another at Lajes Field in the Azores.

The historic around-the-world flight routed the B-1B's over the North Atlantic, through the Strait of Gibraltar, across the Mediterranean Sea, south to the Indian Ocean, north over the Pacific Ocean to the Aleutian Islands, southeast to the western coast of the United States and back to Dyess.

To mirror realistic training scenario for wartime taskings, Coronet Bat incorporated practice bombing runs over the Pachino Range in Italy, the Torishima Range, near Kadena Air Base in the western Pacific and the Utah Test and Bombing Range. The B-1B dropped BDU-50 (inert, concrete-filled Mark 82 500-pound munitions) on the three targets.

According to Air Force spokespeople, the B-1B's unofficially set two records: speed around-the-world, east-bound (with in-flight refueling), unlimited class; and speed around-the-world, east-bound (with in-flight refueling) class C-1.Q (330,000 to 440,000 lbs. at start of record run). Official certification of these records by the National Aeronautic Association will take six to eight weeks after flight completion date.

Subject: TIME TO CLIMB RECORDS

Facts:

On 28 & 28 February 1992 three U.S. Air Force crews, consisting of three crew members each, from the 319th BMW of the Air Combat Command at Grand Forks AFB, North Dakota, flew two B-1B strategic bombers into the record books - shattering eight world time to climb records and setting three others that had never been attempted. A fourth new record was set on 18 March 1992.

Time to climb records are the time it takes an aircraft to take off (brake release) and climb to a set altitude. The B-1B competed in three different weight classes determined by total aircraft weight:

Class C-1.0 (176,368 - 200,460 lbs.) Class C-1.P (220,460 - 330, 690 lbs.) Class C-1.Q (330,690 - 440, 920 lbs.)

Seven of the records were set in 1988 by a U.S. Air Force KC-135R with the eighth existing record set by a DC-10-30.

The B-1B flight was certified by the National Aeronautic Association (NAA) which is the official sanctioning group for aviation record attempts in the U.S. NAA represents the Federation Aeronautique Internationale (FAI) within the U.S. The FAI is based in Paris.

Data:

• Records broken - 8

The records broken are in minutes and seconds: (old records in parentheses)

	Class C-1.0	Class C-1.P
3000 m/9843 Ft	1:13 (2:12)	1:19 (2:48)
6000 m/19686 Ft	1:42 (3:46)	1:55 (3:39)
9000 m/29529 Ft	2:11 (5:40)	2:23 (7:14)
12000 m/39372 Ft	5:02 (7:49)	6:09 (10:15)

New records established - 4

	Class C-1.Q
3000 m/9843 Ft	2:00
6000 m/19686 Ft	2:39
9000 m/29529 Ft	3:48
12000 m/39372 Ft	9:42

B-1B SETS 12 WORLD RECORDS FOR TIME TO CLIMB

TIME TO CLIMB!



Time to Climb Records Set by the B-1B Bomber From: Page E-9 of RI Fact Book NA-95-1210, Ch 5, 20 Jul 95

Facts:

On 28 & 29 Feb 1992 three U.S. Air Force crews, consisting of three crew members each, from the 319th BMW of the Air Combat Command at Grand Forks AFB, North Dakota, flew two B-1B strategic bombers into the record books - shattering eight world time to climb records and setting three others that had never been attempted. A fourth new record was set on 18 March 1992.

Time to climb records are the time it takes an aircraft to take off (brake release) and climb to a set altitude. The B-1B competed in three different weight classes determined by total aircraft weight:

Class C-1.0 (176,368 - 200,460 lbs) Class C-1.P (220,460 - 330,690 lbs)

Class C-1Q (330,690 - 440,920 lbs)

Several of the records were set in 1988 by a U.S. Air Force KC-135R with the eight existing record set by a DC-10-30.

The B-1B flight was certified by the National Aeronautic Association (NAA) which is the official sanctioning group for aviation record attempts in the U.S. NAA represents the Federation Aeronautique Internationale (FAI) within the U.S. The FAI is based in Paris.

Data:

- Records broken - 8

The records broken are in minutes and seconds: (old records in parentheses)

	Class C-1.0	Class C-1.P
3000m/9843 Ft	1:13 (2:12)	1:19 (2:48)
6000 m/19686 Ft	1:42 (3:46)	1:55 (3:39)
9000 m/29529 Ft	2:11 (5:40)	2:23 (7:14)
12000 m/39372 Ft	5:02 (7:49)	6:09 (10:15)

- New records established - 4

3000m/9843 Ft 2:39 9000 m/29529 Ft 3:48

12000 m/39372 Ft 9:42